



National Center for Development of
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Smart Specialisation related initiatives in the case of North Macedonia

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Content

- Who is Radmil?
- Experiences from the implementation of Smart Specialisation in North Macedonia (Industry 4.0)
- Reskilling and upskilling as an initiative within Smart Specialisation
- Lessons learned and opportunities for Centres of Excellence and vocational providers



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Who is Radmil?

- Teaching on Entrepreneurship, Innovation management, etc.
- 160 + projects – supported by EU, OECD, World Bank, ETF, ADA, USAID, GTZ, CEI, UNDP, UNIDO, domestic institutions implemented in Serbia, Montenegro, Bosnia & Herzegovina, Albania, Romania, Moldova, Ukraine, Ethiopia, Tunisia, Morocco, Azerbaijan...
- National SME strategy 2025-2030, National Development Strategy 2024-2044, Regional innovation strategies, National Cluster strategy 2018-2025, National Entrepreneurial Learning Strategy 2014-2020, Analysis of climate literacy in primary and secondary education – 2024, S3 mapping of economic, innovative and scientific potential, etc.
- Last 10 years focus on green skills development
- Support in establishment of **Centre for Excellence in Green Innovation** in 2022 from GREENOVET.EU project



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Who is Radmil? **ETF Green Skills Award 2025 winner!**





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Influence of S3 to other strategic documents (2024 – now)

- National development strategy 2024-2044
- State reform agenda for accession to EU 2024 - 2027
- National SME Strategy 2025-2030
- Circular economy roadmap 2025
- Law on Innovation Activity, Scientific and Technological Development, and Entrepreneurship (adopted - July 2025)
- Conception for VET Education (adopted - May 2025):
 - **Establishment of 8 regional VET Centres that should evolve in Centres of VET Excellence (CoVEs)**
 - **CoVEs are linked to S3 priorities**



S3 domains

VERTICAL DOMAIN

**Smart agriculture and
Food with higher
added value**

Smart agriculture

Food with higher
added value

ICT sector

Custom Software
Development

Advanced ICT
Services

**Smart buildings and
Sustainable
materials**

Smart buildings

Sustainable
materials

**Electro -mechanical
industry / Industry 4.0**

HORIZONTAL DOMAIN

Energy for future - cross sector interrelatedness, energy efficiency, eco solutions, greening the industry and protection of environment

Tourism - cross sector relatedness with ICT, Agro and cultural heritage



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Reskilling energy workers in ESM's (Power Plants)

Supported by:



European Bank
for Reconstruction and Development

Funded by:



Implemented by:



Main beneficiary:



Enhancing ESM's (Power Plants) role in North Macedonia's Just Transition

(project funded by Japan International Cooperation Agency (JICA), managed by EBRD and implemented by PwC North Macedonia together with CIRKO – daughter company of the Faculty of Mechanical Engineering, UKIM (Jun 2023 – Mar 2026))



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Aims of the project

Supported by:



European Bank

for Reconstruction and Development

Funded by:



Japan International
Cooperation Agency

Implemented by:



Main beneficiary:



ЕЛЕКТРАНИ НА СЕВЕРНА МАКЕДОНИЈА

- To support ESM – (Elektrani na Severna Makedonija) in strengthening its capacity to address workforce challenges associated with the country's transition towards a low-carbon energy system.
- To enhancing ESM's readiness to support the workforce dimension of the Just Transition by **strengthening institutional capacity**, promoting **inclusive skills development** and supporting the **creation of sustainable employment pathways** for workers affected by structural changes in the energy sector



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Training of 525 employees (32% female)

- Training on ***Productivity in Production and Service sector*** (with elements of Lean philosophy approach) (50 hours)
- Training on ***Energy Management*** (50 hours)
- ***Solar Photovoltaic (PV) Installer*** Training (80 hours)
- Training for ***Production Process Controller in accordance with Lean Industry 4.0 requirements*** (50 hours)



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Smart Learning Factory Skopje – The Home of Lean Industry 4.0 trainings



<https://learningfactory.mf.edu.mk/>



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Importance of International Regional Collaboration

- Green transition of **Small and Medium Sized Enterprises (SMEs)** requires not only technological solutions, but also development of green skills.
- **Transnational ADRION collaboration** for skills development, green economy and competitiveness.

Interreg



Co-funded by
the European Union

IPA ADRION

Enhancing SMEs' modernization and green innovation and transition towards successful sustainability by transnational collaborative practices and tools

GREENSMES



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Next steps related to S3

- Development of new S3 – 2027 and beyond
- Evaluation of achieved S3 action plan until 2027 with new strong S3 system of monitoring and evaluation
- Building capacities of S3 management structure, as well as institutional support
- Utilising the EDP process of new S3 strategy – **development of new national industrial strategy with focus on Industry 4.0/5.0**



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Lessons learned

- Centres of Vocational Excellence (CoVEs) operationalise **Smart Specialisation Strategies (S3)** by translating priority innovation domains into industry-relevant skills, training programmes, and lifelong learning opportunities.
- **CoVEs can act as key partners** within regional innovation ecosystems, bringing together VET providers, businesses, universities, research organisations, and public authorities **to support knowledge transfer, innovation, and economic growth in S3 priority sectors.**
- By aligning skills development with **regional strengths and future labour market needs, CoVEs help regions achieve the goals of Smart Specialisation** through increased competitiveness, innovation capacity, and sustainable employment.



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Thank you very much for your attention

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